

## 3-Series® Room Media Controller

- > Compact and cost-effective control system
- > 3-Series® Control Engine
- > Exclusive modular programming architecture <sup>[1]</sup>
- > Onboard 256MB RAM & 4GB Flash memory
- > Support for external USB flash memory and mass storage devices
- > Industry-standard Ethernet and Cresnet® wired communications
- > XPanel with Smart Graphics™ computer and Web based control
- > iPhone®, iPad®, Android™, and Samsung Smart TV® control app support
- > Crestron Fusion® Enterprise Management Software support
- > SNMP support
- > One RS-232/422/485 COM port with hardware and software handshaking
- > Two IR/serial, two relay, and two digital input ports
- > Native BACnet®/IP support <sup>[3]</sup>
- > Installer setup via Crestron Toolbox™ or Internet Explorer® <sup>[5]</sup>
- > Backwards compatible to run existing SIMPL programs
- > Full Unicode (multi-language) support
- > Increased network throughput and security
- > Secure access through Active Directory integration or standalone account management
- > Hardware level security using 802.1x authentication
- > Built-in Web Server
- > IPv6 ready
- > USB On-The-Go port
- > PoE network powered
- > Compact, stackable "IFE micro" form factor
- > Surface or DIN rail mountable
- > Available rack mount and pole mount options <sup>[4]</sup>



### 3-Series® Control Systems

Today's commercial buildings and custom homes comprise more technology than ever before, and all these systems need to be networked, managed, and controlled in fundamentally new ways. The IP based 3-Series platform is engineered from the ground up to deliver a network-grade server appliance capable of faithfully handling everything from lighting and AV system control to total building management.

3-Series embodies a distinctively robust, dynamic, and secure platform to elevate your system designs to higher levels of performance and reliability. Compared to other control systems, Crestron 3-Series provides a pronounced increase in processing power and speed with more memory, rock solid networking and IP control, and a unique modular programming architecture.

### Modular Programming Architecture<sup>[1]</sup>

Designed for enhanced scalability, the RMC3 affords high-speed, real-time multi-tasking to seamlessly run multiple programs simultaneously. This exclusive modular programming architecture lets programmers independently develop and run device-specific programs for lighting, shades, HVAC, security, AV, etc., allowing for the optimization of each program, and allowing changes to be made to one program without affecting the whole. Even as your system grows, processing resources can easily be shifted from one 3-Series processor to another without rewriting any code. The end benefit is dramatically simplified upgradability with minimal downtime, whether implementing changes on site or remotely via the network.<sup>[1]</sup>

### Robust Ethernet & IP Control

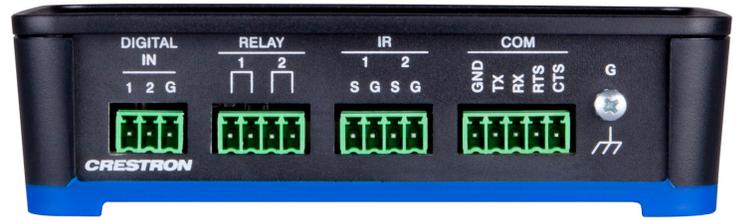
IP technology is the heart of 3-Series, so it should be no surprise that its networking abilities are second to none. High-speed Ethernet connectivity enables integration with IP-controllable devices and allows the RMC3 to be part of a larger managed control network. Whether residing on a sensitive corporate LAN, a home network, or accessing the Internet through a cable modem, the RMC3 provides secure, reliable interconnectivity with IP-enabled touch screens, computers, mobile devices, video displays, media servers, security systems, lighting, HVAC, and other equipment — whether on premises or across the globe.

The Crestron® RMC3 is a compact and cost-effective 3-Series Control System® designed to provide control and monitoring for a single display device, a small AV system, lighting and shading, climate control, security, energy management, and many other specialized applications. Its tiny form factor allows it to be placed just about anywhere with the option to attach it to a flat surface or DIN rail using the mounting bracket provided. It can fit easily behind a video display or above a projector, and provides enough control ports to control the display device along with a screen or lift. Cresnet® and Ethernet connectivity provides full support for the full line of Crestron touch screens, keypads, dimmers, shades, thermostats, and other peripherals. Featuring the 3-Series® control engine, the RMC3 provides a robust, feature-packed controller that's ideal for mass deployment across college campuses, corporate office buildings, museums, MDUs, hotels, and convention centers.

# RMC3 3-Series® Room Media Controller



Front View



Rear View

## Control Apps & XPanel

Years ago, Crestron pioneered the world's first IP-based control system unleashing vast new possibilities for controlling, monitoring, and managing integrated systems over a LAN, WAN, and the Internet. Today, Crestron offers more ways than ever to control your world the way you want. Using a computer, smartphone, tablet, or Smart TV, Crestron lets you control anything in your home or workplace from anywhere in the world.

Native to every 3-Series control system, Crestron **XPanel** technology transforms any laptop or desktop computer into a virtual Crestron touch screen. Crestron control apps deliver the Crestron touch screen experience to **iPhone®**, **iPad®**, and **Android™** devices, letting you safely monitor and control your entire residence or commercial facility using the one device that goes with you everywhere. Even **Samsung Smart TV®** has a Crestron control app available.

## Crestron Fusion® Enterprise Management



**Crestron Fusion** provides an integrated platform for creating truly smart buildings that save energy, enhance worker productivity, and prolong the life-span of valuable equipment. As part of a complete managed network in a corporate enterprise, college campus, convention center, or any other facility, the RMC3 works integrally with **Fusion RV®** Remote Asset Management Software to enable remote scheduling, monitoring, and control of rooms and technology from a central help desk. **Fusion EM®** Energy Management Software enables organizations to reduce energy consumption by tracking real-time usage and automating control of lighting, shades, and HVAC.

## SNMP Support

Built-in SNMP support enables integration with third-party IT management software, allowing network administrators to manage and control Crestron systems on the network in an IT-friendly format.

## Cresnet®

Cresnet provides a dependable network wiring solution for Crestron keypads, lighting controls, thermostats, shades, and other devices that don't require the higher speed of Ethernet. The Cresnet bus offers easy wiring and configuration, carrying bidirectional communication and 24VDC power to each device over a simple 4-conductor cable.<sup>[2]</sup> To assist with troubleshooting, the RMC3 includes our patent-pending Network Analyzer which continuously monitors the integrity of the Cresnet network for wiring faults, marginal performance, and other errors.

## Onboard Control Ports

In addition to Ethernet, the RMC3 includes a variety of control ports for interfacing with third-party equipment. A single bidirectional COM port (RS-232/422/485) and two IR ports allow for interfacing with AV devices, small appliances, and other equipment. Two programmable relay ports are provided for controlling projection screens, lifts, power controllers, door strikes, and other contact-closure actuated equipment. Two digital input ports enable the integration of occupancy sensors, power sensors, door switches, or anything else that provides a dry contact closure or low-voltage logic signal.

## BACnet®/IP



Native support for the **BACnet/IP** communication protocol provides a direct interface to third-party building management systems over Ethernet, simplifying integration with HVAC, security, fire & life safety, voice & data, lighting, shades, and other systems. Using BACnet/IP, each system runs independently with the ability to communicate together on one platform for a truly smart building.<sup>[3]</sup>

## Power over Ethernet

Using PoE technology, the RMC3 gets its operating power right through the LAN wiring. PoE (Power over Ethernet) eliminates the need for a local power supply or any dedicated power wiring. A PoE Injector (**PWE-4803RU**<sup>[4]</sup>) simply connects in line with the LAN cable at any convenient location. Crestron PoE switches (**CEN-SW-POE-5** or **CEN-SWPOE-16**<sup>[4]</sup>) may also be used to provide a total networking solution with built-in PoE.

## Integrator Friendly Enclosure

The RMC3 features the Crestron IFE form factor, a compact "Integrator Friendly Enclosure" design that fits almost anywhere and enables a variety of installation options. Its shape allows multiple RMC3s and other IFE compliant devices to be stacked together. Using the included mounting bracket, it can be fastened to any flat surface or snapped onto a standard DIN rail. Rack mount and pole mount kits are also available.<sup>[4]</sup>

# RMC3 3-Series® Room Media Controller



Shown with mounting bracket

## SPECIFICATIONS

### Control Engine

3-Series®, real-time, preemptive multi-threaded/multitasking kernel; Transaction-Safe Extended FAT file system; supports up to 10 simultaneously running programs (license required)<sup>[1]</sup>

### Memory

DDR3 SDRAM: 256 MB

Flash: 4 GB

External Storage: supports USB mass storage devices

### Communications

**Ethernet:** 10/100 Mbps; auto-switching; auto-negotiating; auto-discovery; full/half duplex; industry-standard TCP/IP stack; UDP/IP; CIP; DHCP; SSL; IEEE 802.1X; SNMP; BACnet®/IP<sup>[3]</sup>; IPv4 or IPv6; Active Directory authentication; Web Server; SMTP e-mail client; installer setup via Crestron Toolbox™ or MSIE<sup>[5]</sup>, IEEE 802.3af and 802.3at Type 1 compliant

**Cresnet®:** Cresnet master mode

**USB:** Supports computer console and USB mass storage devices via USB OTG (On-The-Go) port

**RS-232/422/485:** For 2-way device control and monitoring, supports RS-232, RS-422, or RS-485 up to 115.2k baud with hardware and software handshaking

**IR/Serial:** Supports 1-way device control via infrared up to 1.2 MHz or serial TTL/RS-232 (0-5 Volts) up to 115.2k baud

### Connectors

**DIGITAL IN 1 – 2:** (1) 3-pin 3.5mm detachable terminal block comprising (2) digital inputs (referenced to GND);

Input Voltage Range: 0-24 Volts DC;

Logic Threshold:  $\geq 2.0$  Volts DC 0/low,  $\leq 1.1$  Volt DC 1/high;

Input Impedance: 2.2k Ohms pulled up to 5 Volts

**RELAY 1 – 2:** (1) 4-pin 3.5mm detachable terminal block comprising (2) normally open, isolated relays;

Rated 1 Amp, 30 Volts AC/DC;

MOV arc suppression across contacts

**IR 1 – 2:** (1) 4-pin 3.5mm detachable terminal block comprising (2) IR/Serial output ports;

IR output up to 1.2 MHz;

1-way serial TTL/RS-232 (0-5 Volts) up to 115.2k baud

**COM:** (1) 5-pin 3.5mm detachable terminal block;

Bidirectional RS-232/422/485 port;

Up to 115.2k baud; hardware and software handshaking support

**G:** (1) 4-40 screw, chassis ground lug

**USB-OTG:** (1) USB Type Mini-AB female; USB OTG port for computer console and USB mass storage devices (6 ft A male to Mini-B male cable, and A female to Mini-A male adapter, included)

**LAN PoE:** (1) 8-wire RJ45 female;

10Base-T/100Base-TX Ethernet port, Power over Ethernet compliant

**NET:** (1) 3-pin 3.5mm detachable terminal block;

Cresnet master port (data only, no power)<sup>[2]</sup>

### Controls & Indicators

**PWR:** (1) Dual-color green/amber LED, indicates operating power supplied via PoE, turns amber while booting and green when operating

**NET:** (1) Amber LED, indicates communication with the Cresnet system

**MSG:** (1) Red LED, indicates processor has generated an error message

**LAN PoE:** (2) LEDs, green LED indicates 100Mbps Ethernet link status, amber LED indicates Ethernet activity

**HW-R:** (1) Recessed miniature pushbutton for hardware reset

**SW-R:** (1) Recessed miniature pushbutton for software reset

### Power Requirements

**Power over Ethernet:** IEEE 802.3at Type 1 (802.3af compatible) Class 0 (12.95W) PoE Powered Device

NOTE: Does not use or supply any Cresnet power

### Environmental

**Temperature:** 32° to 104°F (0° to 40°C)

**Humidity:** 10% to 90% RH (non-condensing)

**Heat Dissipation:** 17 BTU/Hr

### Construction

**Enclosure:** IFE micro form factor, black and blue plastic

**Mounting:** Freestanding, stackable, surface mount, or 35 mm DIN EN 60715 rail mount; occupies 8 DIN module spaces (144 mm); surface/DIN rail mounting bracket included, optional rack mount and pole mount kits sold separately

### Dimensions

**Height:** 1.35 in (35 mm), 1.77 in (45 mm) with bracket

**Width:** 5.04 in (128 mm), 5.36 in (137 mm) with bracket

**Depth:** 2.86 in (73 mm)

### Weight

6.4 oz (180 g)

# RMC3 3-Series® Room Media Controller

## MODELS & ACCESSORIES

### Available Models

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**RMC3:** 3-Series® Room Media Controller Available April 1, 2014

### Available Accessories

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**SW-RMC3-10PROG:** 10 Program MPA Support License

**RMK-IFE-1U:** IFE Rack Mount Kit

**PLMK-IFE-101:** IFE Pole Mount Kit

**PWE-4803RU:** PoE Injector

**CEN-SW-POE-5:** 5-Port PoE Switch

**CEN-SWPOE-16:** 16-Port Managed PoE Switch

**CNSP-XX:** Custom Serial Interface Cable

**IRP2:** IR Emitter Probe w/Terminal Block Connector

**CRESTRON-APP:** Crestron® App

**CRESTRON-MOBILE-PRO:** Crestron Mobile Pro® Control App

**CRESTRON-APP-SSTV:** Crestron® App for Samsung Smart TV®

**XPANEL:** Crestron Control® for Computers

**SW-MYCRESTRON:** myCrestron Dynamic DNS Service

**SW-FUSION-EM:** Fusion EM® Energy Management Software

**SW-FUSION-RV:** Fusion RV® Remote Asset Management Software

**SW-ROOMVW-ENT:** RoomView® Express - Remote Help Desk and Resource Management Software

**SW-3SERIES-BACNET-50+:** BACnet®/IP Support for 3-Series™ - Full license for more than 50 objects

**CSP-LIR-USB:** IR Learner

### Notes:

1. To enable Modular Programming Architecture (MPA) on the RMC3 requires the purchase of one SW-RMC3-10PROG license. The license enables support for running up to 10 simultaneous programs on a single RMC3. The license is not required if running only one program on the RMC3.
2. The NET (Cresnet) port on the RMC3 is a 3-pin connector which provides connectivity for Cresnet data only, not power. The Cresnet power conductor does not terminate to the RMC. An external Cresnet power supply is required to provide power for Cresnet devices.
3. License required. The RMC3 supports a maximum of 500 BACnet objects when dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity.
4. Item(s) sold separately.
5. Web-based installer setup requires the Microsoft® Internet Explorer® Web browser running on a Windows® PC.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/salesreps](http://www.crestron.com/salesreps) or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

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